4-1989

SU567709

DERWENT-ACC-NO: 1978-43695A

DERWENT-WEEK: 197824

TITLE: **Fused refractory** material for furnaces - is based on corundum and contains zirconium and boron oxide(s) to reduce porosity

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Basic Abstract Text - ABTX (1):

Fused corundum-based **refractory** material for use in glassmaking and metallurgical furnaces, has increased apparent density and low porosity. Its compsn. (in wt.%) is: **SiO2** 0.3-5.0, TiO2 0.1-0.5, CaO 0.2-0.7, **MgO** 0.1-0.3, Fe2O3 0.1-0.5, Na2O 0.3-2.0, K2O 0.1-0.3, ZrO2 0.5-12.0, B2O3 0.3-2.0, remainder **Al2O3**. The ZrO2 forms centres of crystallisation, helping to produce a dense fine-crystalline structure; the B2O3 forms an alumoborosilicate phase which fills the pores between the corundum crystals. The optimum addns. are 5-7% ZrO2 and 0.3 B2O3.

Title - TIX (1):

Fused refractory material for furnaces - is based on corundum and contains zirconium and boron oxide(s) to reduce porosity

Standard Title Terms - TTX (1):

FUSE **REFRACTORY** MATERIAL FURNACE BASED CORUNDUM CONTAIN ZIRCONIUM BORON OXIDE REDUCE POROUS